



**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF WISCONSIN**

Illinois Tool Works Inc. and
Miller Electric Mfg. Co.,

Plaintiffs,

VS.

Thermal Dynamics Corporation

Defendants.

Case No. 03-C-966

Judge William Griesbach

**PLAINTIFFS' RESPONSES AND OBJECTIONS TO
THERMAL DYNAMICS CORPORATION'S SEVENTH SET OF INTERROGATORIES**

Pursuant to Rules 26 and 33 of the Federal Rules of Civil Procedure, Illinois Tool Works Inc. ("ITW") and Miller Electric Mfg. Co. ("Miller Electric") hereby respond to Thermal Dynamics Corp.'s ("Thermal Dynamics") Sixth Set of Interrogatories ("Interrogatories") with the answers and objections set forth below. Pursuant to Rule 26(e) of the Federal Rules of Civil Procedure, ITW and Miller Electric reserve the right to supplement these responses to the extent that they learn of additional, responsive information.

GENERAL OBJECTIONS

1. ITW and Miller Electric object to Thermal Dynamics' Interrogatories to the extent that they seek information protected from discovery by the attorney-client privilege, the attorney work product doctrine, Rule 26(b)(3) of the Federal Rules of Civil Procedure, a joint defense or common interest privilege, or any other privilege or immunity.

2. ITW and Miller Electric object to Thermal Dynamics' Interrogatories as overly broad and unduly burdensome to the extent they seek to impose upon ITW or Miller Electric duties and/or responsibilities greater than those imposed by the Federal Rules of Civil Procedure, the Local Rules of the District of the Eastern District of Wisconsin, or applicable case law.

3. ITW and Miller Electric's responses to Thermal Dynamics' Interrogatories are made to the best of their present knowledge, information, and belief based upon information currently available to ITW and Miller Electric. These responses are at all times subject to such elaborations, supplementation, and to such additional or different information as discovery or further investigation may produce. In particular, ITW and Miller Electric object to Thermal Dynamics' Interrogatories to the extent they seek to limit the information that ITW or Miller Electric may rely upon at trial in this matter. ITW and Miller Electric's fact investigation and trial preparations are continuing, and ITW and Miller Electric reserve the right to provide and rely on additional documents and things in response to these Interrogatories. ITW and Miller Electric further reserve the right to put forth all evidentiary objections with respect to any response they provide.

4. By this Response, ITW and Miller Electric preserve, and do not waive, any objections or other challenges as to the competence, relevance, materiality, privilege or admissibility of evidence as to any documents or information identified or produced herein, whether in this or any subsequent proceeding or trial in this or any other action.

5. ITW and Miller Electric object to each of Thermal Dynamics' Interrogatories to the extent that they call for documents or information outside the scope of ITW or Miller Electric's knowledge, possession, custody or control.

6. ITW and Miller Electric object to Thermal Dynamics' Definitions to the extent the definition of "ITW" is overly broad. ITW responds on behalf of Illinois Tool Works Inc. and all of its current employees.

SPECIFIC OBJECTIONS AND ANSWERS TO INTERROGATORIES

Without waiving or limiting in any manner any of the foregoing General Objections, but rather incorporating them into each of the following response, ITW and Miller Electric respond to the specific Interrogatory contained in the Sixth Set of Interrogatories as follows:

Interrogatory No. 19:

If you contend that claim 1 of U.S. Patent No. 6,815,639 is infringed, please identify the following claim elements, in the table provided below and on the attached Exhibit A, each component of the accused product that Plaintiff contends meets the following claim limitations of Claim 1 of U.S. Pat. No. 6,815,639 (hereinafter the "Geissler '639 patent"):

- (a) the "control power circuit" and further, circle in red on Exhibit A the "control power circuit";
- (b) the "switch" that is recited as part of the "control power circuit" and circle in blue the "switch";
- (c) the "start-up circuitry" that is recited as part of the "control power circuit" and circle in green the "start-up circuitry"; and
- (d) the "control circuitry" that is recited as part of the "start-up circuitry" and circle in black the "control circuitry", and further identify exactly what the control circuitry controls, how it controls it, what the set point(s) for the controller are and what is being measured for comparison to the set points.

Response to Interrogatory No. 19

Plaintiffs object to this Interrogatory insofar as Exhibit A (produced at TD 45701) is illegible. Plaintiffs have answered based upon the legible schematic (JR 00917) that Thermal Dynamics provided to its expert Dr. Roberge. Subject to the stated Specific and General Objections, Plaintiffs answer as follows:

(a) The “control power circuit” is the circuit listed on the schematic as “Secondary Power.” Further answering, Plaintiffs have circled the “control power circuit” on the schematic.

(b) Plaintiffs object to subpart (b) insofar as the schematic only illustrates TOP243Y in block form, rendering it impossible for Plaintiffs to circle any part of it. Further answering, in Figure 2a of the TopSwitch-GX Manual for the TOP243Y at ME 189745, there is shown the MOFSET which is a “switch.”

(c) Plaintiffs object to subpart (c) insofar as the schematic only illustrates TOP243Y in block form, rendering it impossible for Plaintiffs to circle any part of it. Further answering, in the TopSwitch-GX Manual for the TOP243Y at ME 189745, there is shown the “start-up circuitry” labeled as “Soft Start.”

(d) Plaintiffs object to subpart (d) insofar as the schematic only illustrates TOP243Y in block form, rendering it impossible for Plaintiffs to circle any part of it. Plaintiffs further object to subpart (d) insofar as it erroneously assumes that the claims of ‘639 patent limit the method of operation of the claimed “control circuitry.” Further answering, the TOPSwitch-GX Manual for the TOP243Y at ME 189748 states that the “Soft Start” Circuit contains control circuitry. More particularly, the Manual states: “When the CONTROL pin voltage V_C reaches approximately 5.8V, the control circuitry is activated and the soft-start begins. The soft-start circuit gradually increases the duty cycle of the MOFSET from zero to the maximum value over approximately.” Pursuant to Federal Rule of Civil Procedure 33(d), the operation of the “control circuitry” in the TOP243Y can be ascertained from documents located at ME 189743-189857.

Interrogatory No. 20:

For each of the allegedly infringed claims of the Geissler 6,815,639 patent, please identify:

- a) The dates of conception and first reduction to practice of the invention of that claim;
- b) the earliest uses (public and private) of the invention of that claim;
- c) the earliest offer for sale of any embodiment of the invention of that claim;
- d) the earliest publication of anything that refers or relates to the invention;
- e) all documents that refer or relate to the sale of any invention covered by that claim;
- f) the names and addresses of all persons with any knowledge of such conception, reduction to practice, use, offer for sale, or publication of the invention of that claim, including but not limited to identification of all individuals who built, in whole or in part, the first embodiment (i.e. the first reduction to practice) of the invention; and
- g) the identification of all documents related to such conception, reduction to practice, use, offer for sale, or publication.

Response to Interrogatory No. 20:

Plaintiffs object to this Interrogatory to the extent that it seeks information protected by the attorney-client privilege and/or the work product doctrine. Plaintiffs also object to this Interrogatory as multi-part and containing multiple Interrogatories in violation of the Local Rules of this Court. Subject to the stated General and Specific Objections, Plaintiffs respond as follows:

(a) Subject to further investigation, the inventions of the '639 patent were conceived by December 1996. The inventions of the '639 patent were reduced to practice by November 1997.

(b) Plaintiffs object to this sub-part as vague and ambiguous because the term "private use" is undefined. Subject to further investigation, and assuming Plaintiffs understand Thermal Dynamics' use of the word "private," Steven Geissler "privately used" the inventions of the '639 patent on or near November 1997. Subject to further investigation, the inventions of the

'639 patent were first publicly used on or after September 2000. In particular, in September 2000, Miller Electric sold the Maxstar 200, a commercial embodiment of the inventions of the '639 patent.

(c) Subject to further investigation, the earliest offer for sale of any embodiment of the inventions of the '639 patent was shortly before September 12, 2000. The first sale of a Maxstar 200 product occurred on September 12, 2000. Further answering, documents relating to sales of the Maxstar 200 can be located at ME 100015-100520.

(d) Plaintiffs object to this sub-part as vague and ambiguous because the meaning of the phrase "publication of anything that refers or relates to the invention" is unclear. Plaintiffs also specifically object to this sub-part as unduly burdensome because the phrase "anything that refers or relates to the invention," to the extent the meaning of this phrase can be ascertained, has an unreasonable and overly broad scope. Plaintiffs cited references to the United States Patent & Trademark Office in connection with the prosecution of the '639 patent and its parent applications. The publication dates of such references can be derived from the face of the '639 patent which was attached as an exhibit to Plaintiffs' Complaint.

(e) Documents responsive to this request can be located at ME 100015-100520. Plaintiffs are in the process of searching for additional documents. To the extent that additional documents are located, Plaintiffs will supplement this response.

(f) Subject to further investigation, Steven Geissler, Mike Madsen, Bernie Vogel, George Corrigan, Dennis Sigl, and Bruce Albrecht may have knowledge regarding at least some of the information identified in this sub-part.

(g) Subject to further investigation, in addition to documents identified above, responsive documents may be located at ME 188672-189742 & 189858-189859. In addition,

Plaintiffs will supplement this response to identify additional documents which will be produced shortly.

Interrogatory No. 21:

For each asserted claim of U.S. Thommes Patent Nos. 6,239,407 and 6,849,827, if you contend that such claim is not anticipated by the Sansha reference (translations attached as Exhibits B and C), please: (a) identify all facts, law or any other reasons why you so contend, and identify all documents that support your position and all witnesses who have knowledge of any facts or reasons that support your position, (b) for each claim you contend is not anticipated, identify the patent and claim number, and identify all elements of the claim that are not present in the Sansha reference and (c) if you contend that there are material differences between Exhibits B and C attached hereto, please identify what they are.

Response to Interrogatory No. 21:

Plaintiffs object to Interrogatory No. 21 to the extent that it calls for information protected by the attorney-client privilege and/or the work product doctrine. Plaintiffs further object to Interrogatory No. 21 as premature insofar as it calls for expert testimony in advance of the Court ordered deadline for disclosure of expert opinions. Subject to the stated General and Specific Objections, Plaintiffs answer as follows:

(a) Plaintiffs contend that no claim of either Thommes patent is anticipated by the Sansha reference. Subject to further investigation and supplementation, facts supporting Plaintiffs' contention are the Thommes patents and accompanying prosecution histories and the Sansha reference. Legally, Plaintiffs so contend because (1) the Sansha reference does not meet every element of any Thommes patent claim and (2) the Sansha reference does not contain an enabling disclosure. To the extent necessary, at the time ordered by the Court, Plaintiffs will

offer expert testimony rebutting any argument by Thermal Dynamics that the Sansha reference anticipates any Thommes patent claims.

(b) For the Thommes '407 patent, subject to further investigation and supplementation, for asserted claims 1, 9, 16 (and all asserted dependent claims), the Sansha reference at least does not disclose respectively "a controller including a power factor correction circuit," "power factor correcting an ac input signal to a second ac signal," and "converting means for converting and power factor correcting the dc signal to a second ac signal." Further answering, for claim 2, the Sansha reference does not disclose "an auxiliary power source capable of providing a control power signal at a preselected control signal voltage, regardless of the magnitude of the ac input signal." For claim 11, the Sansha reference does not disclose "wherein the inverting includes the step of pulse width modulating." For claim 18, the Sansha reference does not disclose "means for providing control signals to an inverter." For claim 19, the Sansha reference does not disclose "means for providing an auxiliary power signal and for transforming the ac input signal into the auxiliary power signal." For claim 21, the Sansha reference does not disclose "wherein the means for inverting includes means for pulse width modulating."

For the Thommes '827 patent, subject to further investigation and supplementation, for asserted claims 1, 10, 15, 20, and 30 (and all asserted dependent claims), the Sansha reference at least does not disclose respectively "a controller including a power factor correction circuit," "power factor correcting an ac input signal to a second ac signal," "control means for controlling the converter means, wherein the control means includes a power factor correction means for power factor correction," "a controller including a power factor correction circuit," and "a controller including a power factor correction circuit." Further answering, for claim 2, the

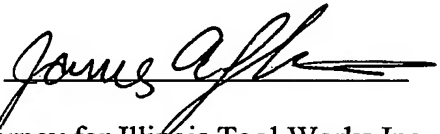
Sansha reference does not disclose “an auxiliary power source capable of providing a control power signal at a preselected control signal voltage, regardless of the magnitude of the ac input signal.” For claim 5, the Sansha reference does not disclose “wherein the output circuit includes a pulse width modulator.” For claim 13, the Sansha reference does not disclose “wherein changing includes pulse width modulating.” For claim 21, the Sansha reference does not disclose “an auxiliary power source capable of providing a control power signal at a preselected control signal voltage for a plurality of magnitudes of the ac input signal.” For claim 24, the Sansha reference does not disclose “wherein the switched circuit is a pulse width modulator.” For claim 30, the Sansha reference does not disclose “an auxiliary power source capable of providing a control power signal at a preselected control signal voltage, for a plurality of input voltages.”

(c) Plaintiffs object to subpart (c) insofar as it requires Plaintiffs to speculate into the mental processes of Thermal Dynamics’ translator. Further answering, while Plaintiffs cannot be certain as to the meaning ascribed to various words by Thermal Dynamics’ translator, Plaintiffs contend that the two translations appear to be generally similar. Subject to further investigation and supplementation, Plaintiffs note the following differences between the two translations: (1) “condensers” in Ex. C vs. “capacitors” in Ex. B and (2) “power efficiency” in Ex. C vs. “power factor” in Ex. B.

DATED: March 21, 2005

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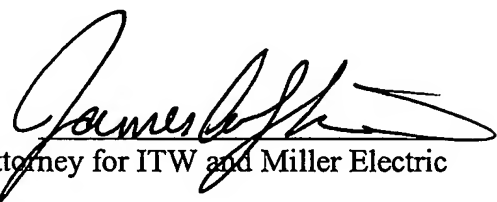
CERTIFICATE OF SERVICE

This is to certify that a true and accurate copy of ITW AND MILLER ELECTRIC'S RESPONSES AND OBJECTIONS TO THERMAL DYNAMICS' SEVENTH SET OF INTERROGATORIES was served on the following individuals via Facsimile and U.S. Mail on the 21st of March, 2005.

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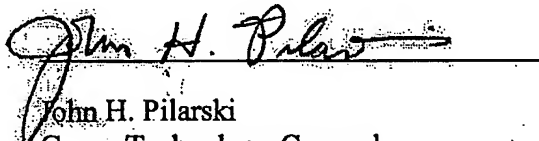
VERIFICATION

STATE OF ILLINOIS

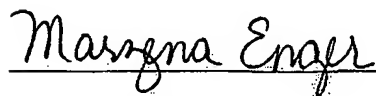
COUNTY OF COOK

I, John H. Pilarski, an employee of Illinois Tool Works Inc. ("ITW"), have read PLAINTIFFS' RESPONSES AND OBJECTIONS TO THERMAL DYNAMICS CORPORATION'S SEVENTH SET OF INTERROGATORIES. I certify that the facts and information set forth in these Responses are true and correct to the best of my knowledge, information and/or belief in my official capacity at ITW. Any facts contained in these responses are known to me personally or have been conveyed to me by knowledgeable employees of ITW.

I verify under penalty of perjury that the foregoing is true and correct.


John H. Pilarski
Group Technology Counsel
Illinois Tool Works Inc.

Subscribed before
me this 21st day of March 2005



Notary Public

My Commission Expires: 1/25/08

[SEAL]

